

TOP SECRET

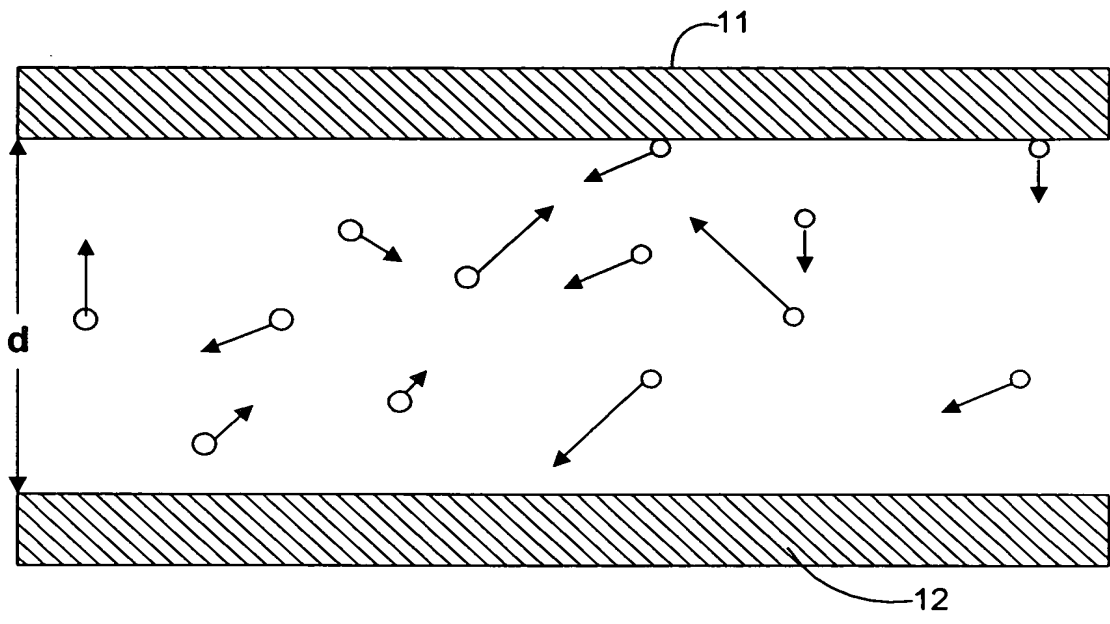


FIG. 1

## Thermal conductivity of gases

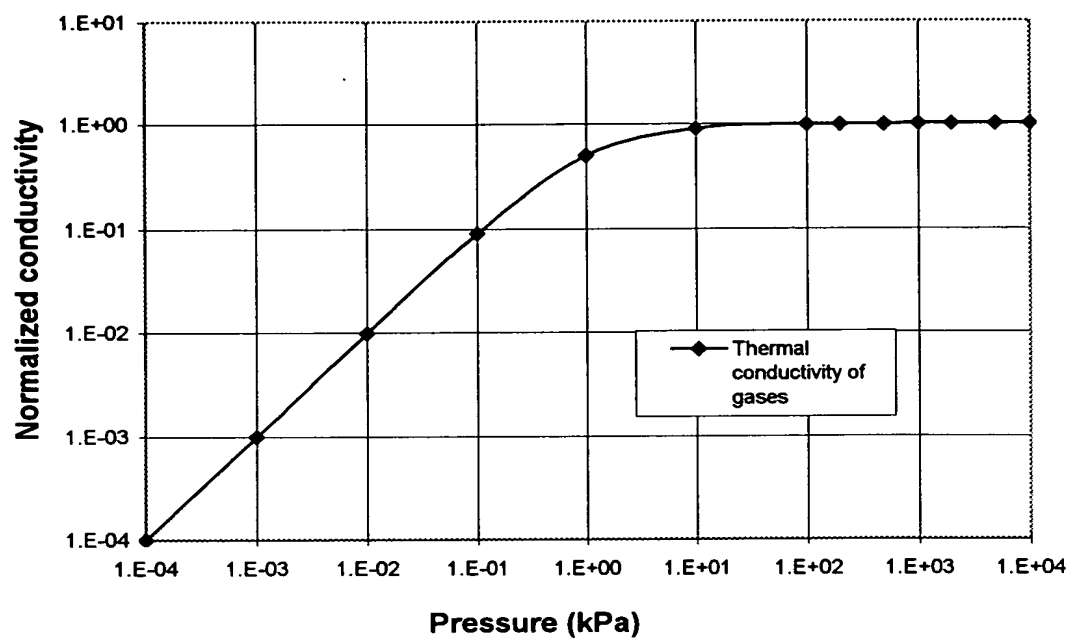
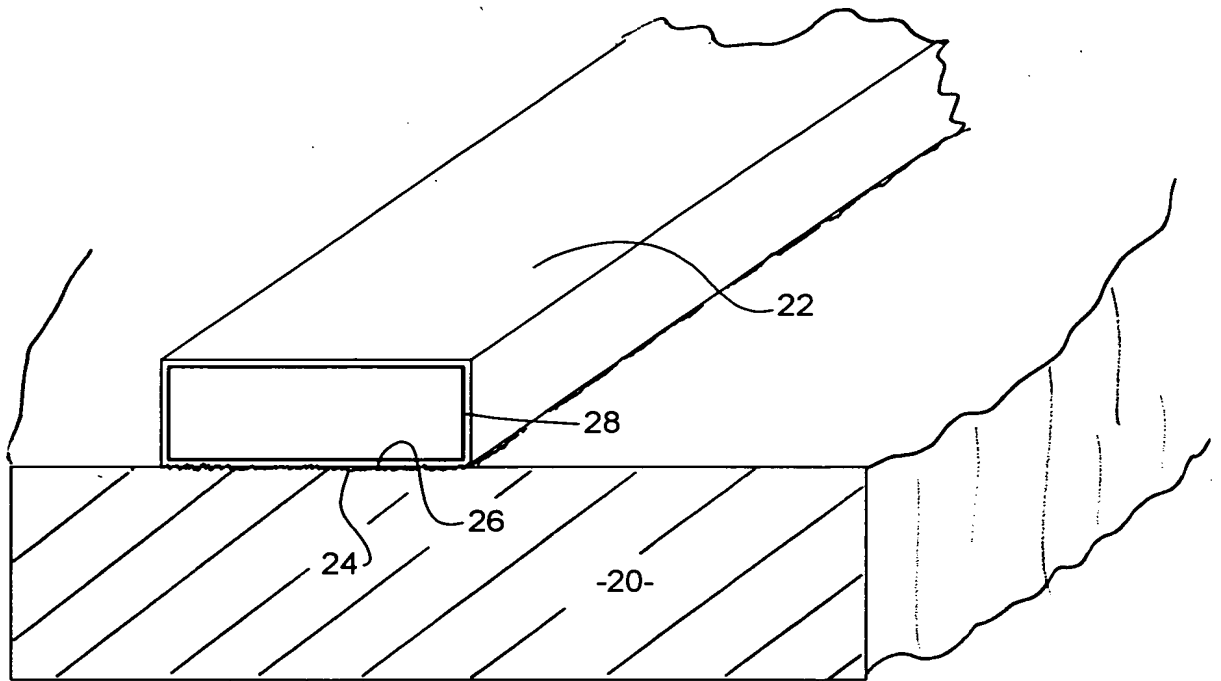


FIG 2

TOP 200 200 200 200



**FIG. 3**

The diagram illustrates the following components and steps:

- Bonding pad**: Two rectangular pads on the substrate for electrical connection.
- cantilever support**: A structure that supports the bridge and is released after etching.
- Polysilicon heater/sensor bridge**: The central functional element of the device.
- Leftover oxide after etching**: The remaining oxide layer on the substrate.
- Silicon substrate**: The base material for the device.
- Cantilever support and bridge released after oxide etching**: The final state of the device after the oxide has been removed.

A perspective view of a silicon substrate 20. It features two square bonding pads 28 and two rectangular cantilever supports 30. The cantilevers are connected to the pads and extend towards the center of the substrate. A label points to the cantilevers stating "cantilevers formed by surface tension".

FIG 4

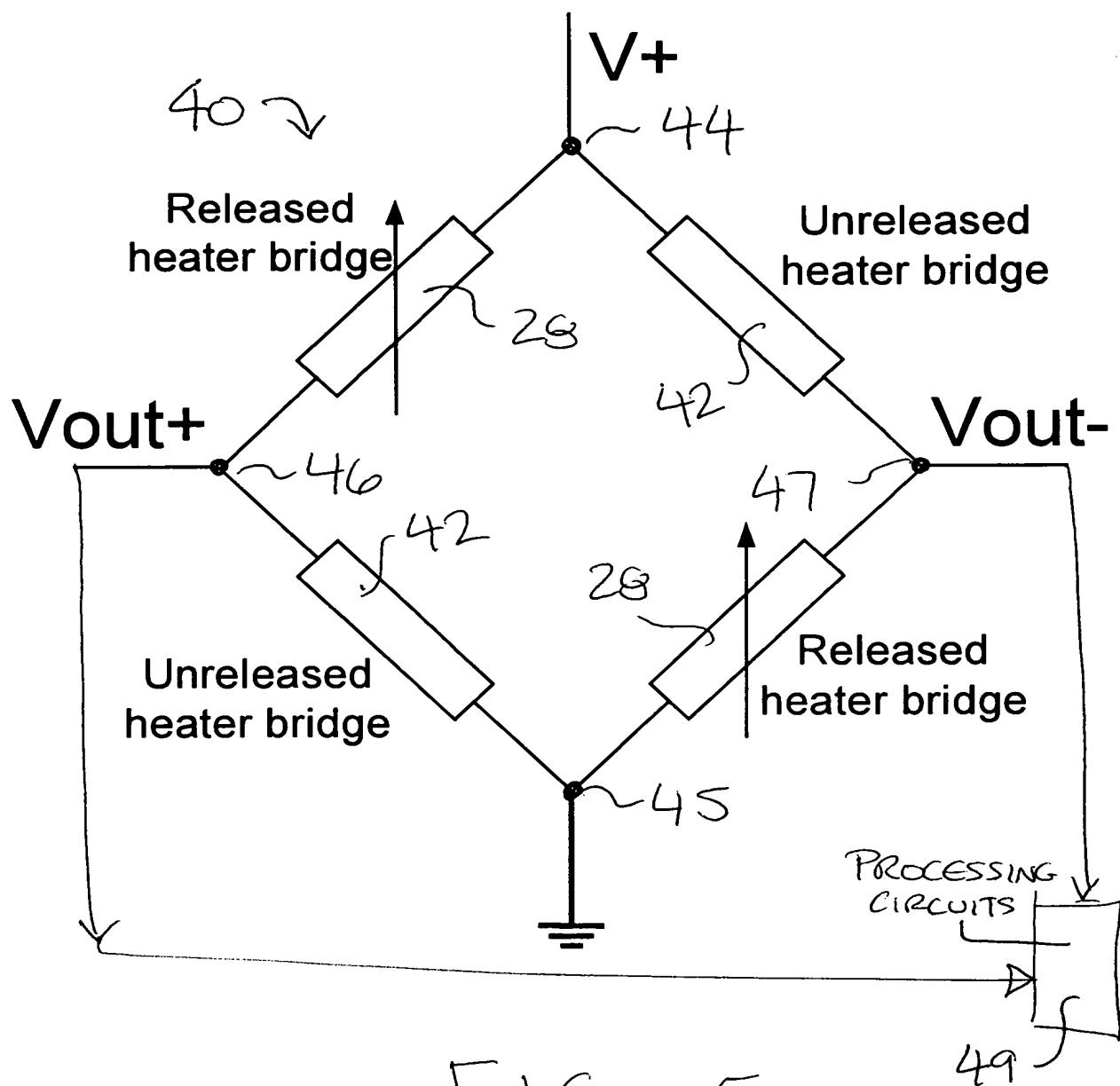
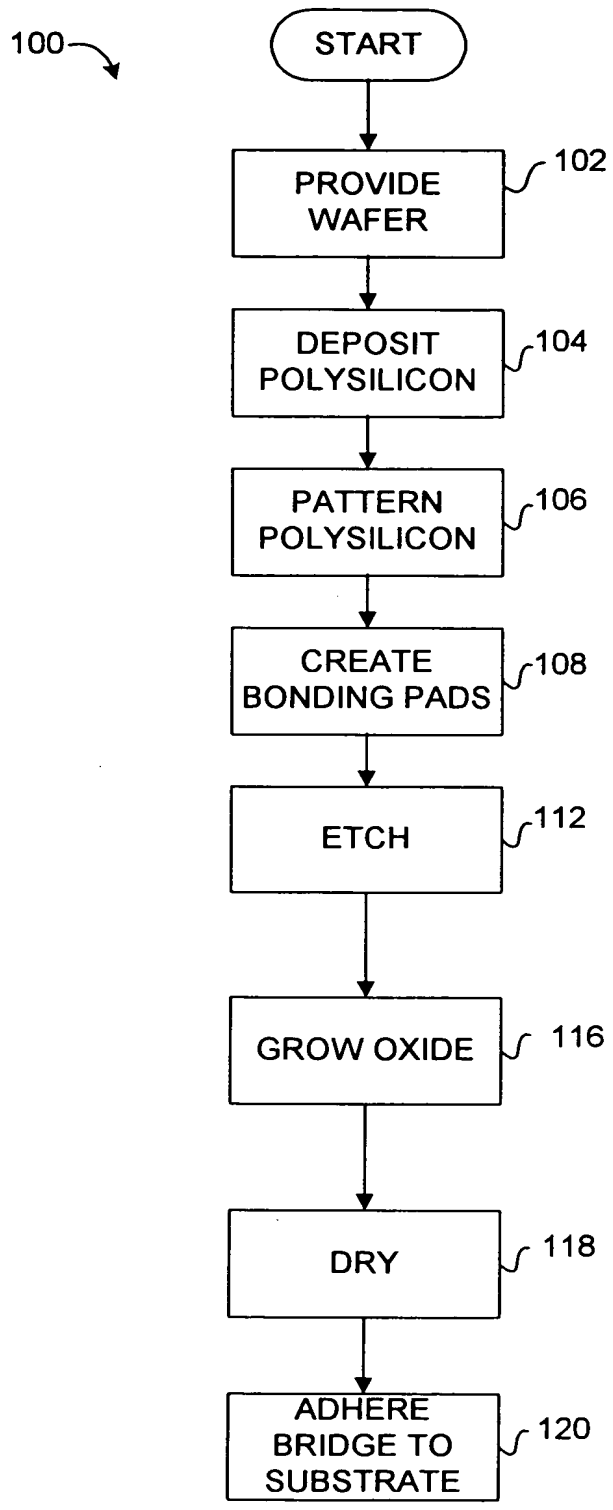
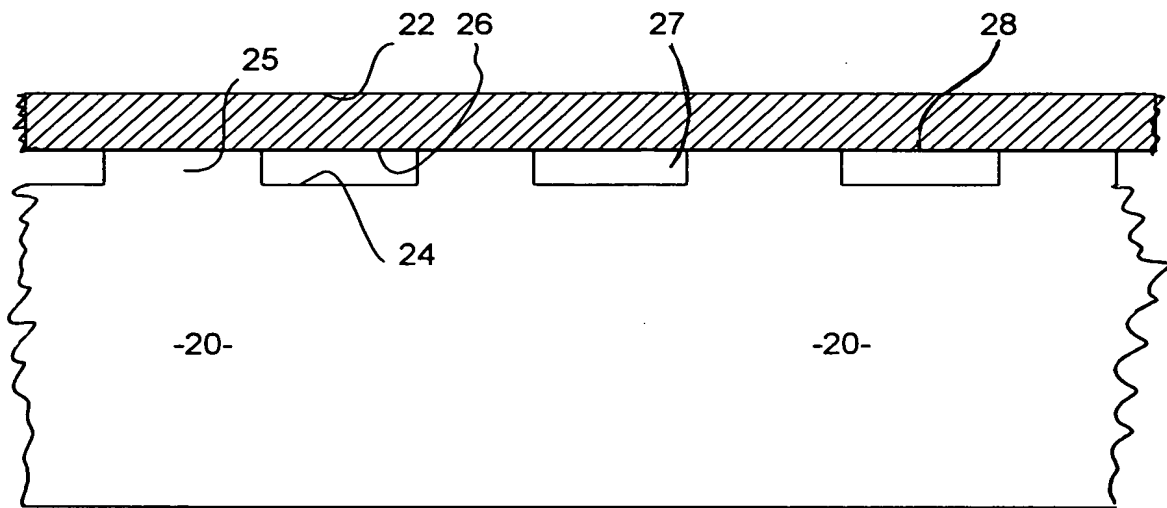


FIG 5



**FIG. 6**



**FIG. 8**